

INTELLIGENT DOCKING STATION FOR A HANDHELD

PERSONAL COMPUTER

ABSTRACT

The invention transfers a data element from a device to a handheld computer.

5 In general, the method receives a device-based data element at a docking station
based co-processor, performs a driver conversion to convert the device-based data
element into a bus-enabled data element, and places the bus-enabled data element on
a handheld compatible bus. The method may also transform a data packet by
detecting an input packet, retrieving a packet identifier (ID) from the input packet,
10 and dispatching the input packet to a device driver based on the packet ID, the device
driver capable of converting the input packet from a handheld computer packet type
to a device packet type. The invention is also the systems that enable the method.
As a device, the invention is an intelligent docking station. The intelligent docking
station includes a co-processor capable of converting a hand held-based data element
15 into a device enabled data element, a bus interface coupled to the co-processor, and a
port coupled to the co-processor. The invention is also a system that incorporates the
intelligent docking station.